Graft Copolymers, Their Preparation and Use in Capillary Electrophoresis

ABSTRACT

The invention relates to graft copolymers, their preparation, and compositions, such as electrophoresis separation media, containing the same; also to ultra-high molecular weight poly(*N,N*-dimethylacrylamide) ("poly(DMA)") polymers, their preparation, and compositions, such as electrophoresis separation media, containing the same; and more particularly to supports, such as capillaries, containing these polymers and methods for separating biomolecules, especially polynucleotides, using capillary electrophoresis. The graft copolymers can be prepared by, e.g., grafting polyacrylamide units onto a poly(DMA) backbone. Separation media comprising such graft copolymers or ultra-high molecular weight poly(DMA) polymers yield superior performance in the analysis and separation of biomolecules by capillary electrophoresis.